

Before the **DOCKET FILE COPY ORIGINAL**
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

RECEIVED

AUG 20 2001

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the Matter of)	
)	
Revision of the Commission's)	
Rules to Ensure Compatibility)	CC Docket No. 94-102
with Enhanced 911 Emergency)	
Calling Systems)	
)	
Request for Waiver of Qwest Wireless,)	DA 01-1816
LLC and TW Wireless, LLC)	

COMMENTS OF NENA, APCO AND NASNA

The National Emergency Number Association ("NENA"), the Association of Public-Safety Communications Officials-International, Inc. ("APCO") and the National Association of State Nine One One Administrators ("NASNA") (collectively, "Public Safety Organizations") hereby comment on the captioned waiver request ("Request"), pursuant to the FCC's Public Notice DA 01-1816 released July 30, 2001.

Two months ago, the applicants (collectively, "Qwest") "made the decision to pursue" the handset-based Phase II location solution known as assisted GPS ("AGPS") in place of their earlier choice of a network-based solution. Since the filing of the report reflecting that original decision, Qwest explained:

[W]e have become increasingly disenchanted with the suitability of a "network" solution for our broadband PCS network to meet the Commission's rules and public safety objectives and its limitations with respect to our customers' service expectations.¹

¹ Request, Attachment A, 2.

No. of Copies rec'd 014
US1A BODE

Qwest implies that while it might have preferred an AGPS solution in the first place, “handset vendors declined to commit to a manufacturing deployment schedule that would begin to accommodate the Commission’s October 1, 2001 Phase II deployment requirements.”

Accordingly,

Qwest Wireless was compelled to pursue a network-based solution based on then-existing vendor claims. Essentially, the decision to proceed with a network-based solution was grounded in default rather than in a belief in the superiority of such solution. (Request, 3)

In its reconsideration order released a year ago revising the Phase II implementation schedules and accuracy requirements for Phase II wireless E9-1-1 service, the Commission acknowledged that carriers operate in an environment of imperfect information and changing technology. But it strongly warned the licensees to get on with the job:

We expect wireless carriers to work aggressively with technology vendors and equipment suppliers to implement Phase II, and to achieve full compliance as soon as possible. Carriers should not expect to defer providing a location solution if one is available and feasible. If a carrier’s preferred location solution is not available or will not fully satisfy the rules, in terms of accuracy and reliability or timing, the carrier would be expected to implement another solution that does comply with the rules. Further, if no solution is available that fully complies, the carrier would be expected to employ a solution that comes as close as possible, in terms of providing reasonably accurate location information as quickly as possible.

“It is not sufficient,” the Commission added

for a carrier to undertake a minimalist approach in which the carrier conducts certain tests, decides that the tests do not definitively demonstrate that the technologies tested will satisfy the Commission’s requirements in all situations, and as a result, declines to implement any ALI solution.

In considering enforcement against laggard licensees, the Commission would

take into account the extent to which carriers have made concrete and timely efforts to comply and to which their failure to do so was the result of factors outside their control.²

When this explicit admonition was given to the wireless carriers, J-STD-036 was three months old. Manufacturers and vendors presumably were prepared to receive instructions and take orders from the carriers. Despite this seeming state of readiness, Qwest and other waiver applicants have been unable to follow through. Below, we consider whether Qwest “made timely and concrete efforts to comply” and whether its failure was “the result of factors outside [its] control.”

I. Qwest did not “work aggressively” to comply.

Qwest asserts that it “expended significant time and resources” in pursuing a network-based solution.” (Request, 3) The claim is not supported by the Request or its attachments. Instead, the current record (Request, 21-27) shows:

- That Qwest faults third-party network solution vendors for not agreeing to “live” tests of their technologies on Qwest commercial systems.
- That Qwest finally agreed, in April of 2001, to participate in a Grayson test in what the carrier calls a “very controlled environment.” (Request, 23)
- That although “Grayson’s technology performed in compliance with the Phase II rules” in that test, “additional testing in a live network would be required to verify the results before any commercial deployment could be considered.” *Id.*
- That unidentified additional testing “utilizing fewer cell sites in range of the caller” and “in certain indoor environments” produced either failed or unpredictable location results. *Id.*
- That U.S. Wireless and TruePosition test results – produced on non-Qwest networks – are either disputed or not known, and in any event involved urban environments not representative of most of Qwest’s service areas. (Request, 27)

² Fourth Memorandum Opinion and Order, 15 FCC Rcd 17442, 17458, ¶45.

We respectfully suggest that this was not the aggressive effort the Commission said it expected from its wireless carrier licensees. Assuming Qwest is correct in its claim that no vendors would agree to test on Qwest systems,³ it would have been prudent, in light of the Commission's admonition, to proceed more energetically with the test beds that were available. Instead, Qwest retreated to what looks very like the "minimalist approach" the FCC warned against. It decided that the tests to which it had access "do not definitively demonstrate that the technologies tested will satisfy the Commission's requirements in all situations."⁴ Qwest's behavior, we submit, was of the passive (if not actively negative) sort one might expect from a carrier who felt its Phase II choice was "grounded in default."

As if acknowledging the weakness of its network-solution efforts, Qwest devotes a disproportionate share of its Request to an attempt to demonstrate that, even if it had stuck to its original choice, it would have encountered "substantial delays" making a waiver necessary anyway. (Request, 28-34) We are at a loss to understand the purpose of alleging the eight barriers bulleted at pages 28-29 of the Request. Only the second of these appears to relate to the relatively recently-concluded standards process. The rest seem to be universals or constants associated with the implementation process that Qwest could have assumed from 1996 forward. If these challenges were as obstructive as Qwest portrays them, the carrier would have been

³ There is no documentation for this claim. We are attempting to check with the vendors involved and we assume the Commission will do the same.

⁴ Qwest, of course, is not the only carrier to reject third-party network solutions on the ground that they do not perform equally well in all settings. The Public Safety Organizations' comments on the AT&T and Nextel waiver requests have attempted to highlight the positives of compliance by certain network vendors in multiple environments. Among the successful test areas have been suburban, which Qwest acknowledges (Request, 13) to be descriptive of much of its territory. At Section IV, *infra*, we discuss multi-vendor solutions.

justified, it seems, to ask for a rule change or a waiver a year or more ago. Instead, it waited until the end of July, three months from the October, 2001 deadline.

In sum, for the period it was supposed to be pursuing a network solution⁵ Qwest failed to meet the FCC's expectation that it would "employ a solution that comes as close as possible, in terms of providing reasonably accurate location information as quickly as possible." Had it done so, the present Request might have been made narrower, if not avoided altogether.

II. The AGPS proposal requires additional information and explanation.

Having settled on a handset solution, for better or worse, Qwest appears to have been much more energetic in pursuing its implementation. The schedule proposed for handset introduction does not lag by much the comparable proposal of Sprint PCS.⁶ We think the following points, however, are worth some additional examination:

- What is the source of the statement (Request, 11): "Utilizing a hybrid solution, a handset can be located within 6-12 seconds, before defaulting to providing Phase I information?"⁷
- Why is it assumed that PSAP requests must be preceded by a "mapping software" upgrade? (Request, Attachment A, 14)
- Neither Qwest (Request, 5) nor Nortel (Request, Attachment B) explains why

⁵ The starting point for Qwest's examination of location solutions is never stated precisely, but the Request at 21 alludes generally to a long period of RFIs and RFPs preceding its November 2000 report tentatively choosing the network method.

⁶ Sprint PCS Supplemental Phase II Implementation Report and Request for Temporary and Limited Waiver ("Sprint Request"), July 30, 2001, 5-6. The Public Safety Organizations will be commenting separately on the Sprint Request.

⁷ A report prepared for Nextel is cited (Request, note 22), but we are not clear whether it is the location vendor or the carrier who is proposing to order default after 12 seconds. Is that interval the subject of any standard? *See also*, Request, note 31, where the OET Guidelines on location accuracy evaluation are cited. In context, the Guidelines do not appear to be setting a maximum time for a location "fix," but instead to be allowing multiple fixes as an option to a first, or single, determination.

- Nortel's switch upgrades are on a timetable almost a year longer than that of Lucent.⁸
- Since Qwest puts great store on AGPS as the only solution which can meet its rural service needs, it should explain how "a mixture of AFLT RTD and Pilot Strength Measurement Messages (PSMM) with AGPS" will work to this purpose. What are PSMM? (Request, 14)
- Given Sprint PCS's proposal to achieve 100% introduction of AGPS handsets by the end of 2002, the Commission should satisfy itself as to the validity of Qwest's asking for a waiver period longer by three months. The coincidence of 3G conversion and a shortage of chipsets is common to both Qwest and Sprint waiver requests and will be discussed in more detail in our comments on the latter.
- Despite the dates at Request, 5, the Public Safety Organizations are concerned with the generality of Qwest's warning (Request, Attachment A, 14) that it may have to "prioritize" PSAP requests for Phase II service, even after necessary switch upgrades and other states of readiness have been reached. Is Qwest asking for an open-ended waiver of the six-month rule?⁹
- At this late hour, we think quarterly progress reports (as proposed by AT&T, Sprint and ALLTEL) are more appropriate than six-month intervals. As waivers push compliance farther and farther out, assurances of fulfillment become more critical.

For all the trust Qwest places in AGPS, it concedes, as it must, that the waiver schedules proposed for both switch upgrades and handset delivery may slip. Accordingly, the Public Safety Organizations suggest, as they did in their comments on the Nextel and AT&T waiver requests,¹⁰ that the Commission secure the best written commitments it can get from Lucent, Nortel, Compaq, Kyocera, Samsung, Intrado and the other vendors named by Qwest as essential to the realization of its waiver proposal.

⁸ In addition to satisfying itself that the disparity is reasonable, the Commission should evaluate the impact in relation to the number of Qwest customers served by Nortel switches versus the number served by Lucent switches. Attachment B to the Amended Report (Request, Attachment A) identifies by switch vendor a few PSAP Phase II service requests received or anticipated, but gives no subscriber numbers.

⁹ The implication (Request, 17) that Phase I-capable, NCAS solutions can be installed on a shorter timetable requires further explanation. What about "hybrid CAS?"

¹⁰ Respectively, July 19th and August 8th, 2001.

In the end, however, as Qwest acknowledges:

It is the wireless carriers – not their downstream suppliers or regulatory oversight authorities – that have front-line responsibility and accountability to the public for the accuracy and ultimate success of E911. (Request, 10)

It is for this fundamental reason that the Public Safety Organizations are concerned over the absence of any interim Phase II location solution in Qwest’s proposal, pending the availability of AGPS system-wide, and the lack of any contingency plan in the event that AGPS fails to perform as expected in all areas – *e.g.* indoors, where Qwest has faulted network solutions without acknowledging that AGPS also encounters difficulties.

III. The Commission should require an interim solution and a contingency plan, or some explanation of why these are not needed.

Like other carriers requesting waiver, Qwest does not expect to be fully compliant with the Phase II wireless E9-1-1 rules for two or more years. This is a long time for some of its customers to be left with only Phase I location capability. In granting the VoiceStream waiver on which other applicants have relied to some degree, the Commission noted the value of an interim solution, called “RSS,” that would serve as a “safety net” improvement over Phase I until VoiceStream could realize fully the expected E-OTD capabilities. No such interim solution is proposed by Qwest.¹¹ The Request, at 13, proposes only to “continue to research the use of trilateralization techniques to determine whether we can provide location information for legacy handsets” beyond Phase I capability.

¹¹ Nor by Nextel in its waiver request, an omission faulted in our Further Comments of July 19, 2001. The VoiceStream grant did not rely primarily on the gross accuracy reported as achievable by RSS, and the mixed public safety reaction to the grant should not be taken as endorsement -- especially at this late date when other network solutions are doing better -- of RSS’ claimed 500-1000 meter results.

Apart from the relatively long transition to compliance and the lingering problem of legacy handsets, the need for an interim solution arises not just from the VoiceStream precedent but also from the FCC's general admonition that carriers "come as close as possible to full compliance." For us, this requirement means not only shortening the transition time but also considering how to bridge the location differential between Phase I and Phase II. This is all the more significant when third-party network vendors have demonstrated compliant solutions in at least some service area classifications.

Nextel has responded – most recently with some heat¹² – that installing an interim solution would defeat the purpose by slowing down the ultimate location capability. The Public Safety Organizations took that to be an unsupported conclusion and asked that it be documented. We ask the same of Qwest here. We ask that Qwest deploy an intermediate location solution -- particularly in some of the Nortel areas where the AGPS solution will be longest delayed – or explain why that cannot be done or would be counterproductive.

Our recommendation for "interim" solutions should not be confused with our criticism of AT&T's MNLS proposal, which is not interim but aimed to last for the indefinite life of its TDMA network. Accuracy thus becomes more critical than in the interim case.

IV. The rules allow more "hybrids" than the carriers appear to have conceived.

In seeking to justify their waiver requests, most carriers have argued that they could not find single solutions that would be viable across all their service areas, or within given service areas having rural, suburban and urban characteristics. But there is nothing in the wireless E9-1-1 rules that compels singular solutions. Instead, so far as we can tell, this search for the universal solution has been driven by economic or other business considerations.

¹² Reply Comments, August 2, 2001

Recently, a few waiver applicants have begun to realize that one solution may not fit every service area, or each sector within a service area. AT&T has acknowledged that third-party vendor solutions may work better in some of its territories than would the home-grown MNLS solution it originally proposed for the entirety of the TDMA network.¹³ Verizon has proposed to install Grayson location technology in three markets while it works on a Lucent counterpart to MNLS called EFLT.¹⁴

For that matter, we believe that a combination of handset and network-based technologies might be an even stronger solution for some carriers in certain areas than reliance on handset or network-based technologies alone. It would be insufficient, we believe, to respond with arguments based on economies of scale or scope. Given the millions of dollars carriers are spending, and will spend, on new generations of wireless and/or new air interfaces, the money spent on switch-by-switch or site-by-site upgrades – to accommodate the location solutions best suited to saving lives and property in the area – should be only a secondary consideration at best.

Another value of such a truly hybrid approach would be its application to contingencies. Nobody can say for sure that any single location solution today will always outperform all others. In the event that AGPS fails to perform as Qwest and Verizon and Sprint hope it will, these carriers will have a much readier fallback solution than if they ignore network solutions altogether. The same would be true in reverse, although we have yet to encounter a carrier placing sole reliance on a network solution.

¹³ Letter to Wireless Bureau Chief Thomas Sugrue, August 6, 2001, 3.

¹⁴ Updated Phase II E911 Report and Request for Limited Waiver, July 25, 2001, 6. We will be commenting separately on the Verizon request.

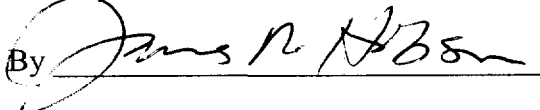
In sum, Qwest should either propose an interim solution, and disclose its contingency plans in the event AGPS performs poorly or is further delayed, or explain why these actions would be counterproductive.

CONCLUSION

For the reasons discussed above, the Commission should decline to grant the Qwest application for waiver until it supplies the further information and explanation that are required by administrative law generally and the VoiceStream precedent particularly.

Respectfully submitted,

NENA, APCO and NASNA

By 

James R. Hobson
Miller & Van Eaton, P.L.L.C.
1155 Connecticut Ave. N.W., Suite 1000
Washington, D.C. 20036
(202) 785-0600
Counsel for NENA

Robert M. Gurss
Shook Hardy & Bacon, L.L.P.
600 14th Street N.W., Suite 800
Washington, D.C. 20005
(202) 662-4856
Counsel for APCO

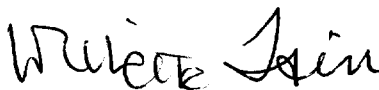
August 20, 2001

THEIR ATTORNEYS

CERTIFICATE OF SERVICE

The foregoing "Comments of NENA, APCO and NASNA" were mailed August 20, 2001 to:

Sharon J. Devine
Kathryn Marie Krause
1020 19th Street N.W., Suite 700
Washington, D.C. 20036



Willette Hill